AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 43] SATURDAY, OCTOBER 23, 1852 [WHOLE No. 862 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

American Railroad Journal.

Saturday, October 23, 1852.

Railroad Iron.

A correspondent, writing from Cincinnati, while approving in general terms the recent article in our paper upon the removal of duty on rails for *first* tracks of roads, asks for our view of the plan proposed for the manufacture of rails suggested by him, in the following familiar letter to a friend residing in the iron making district of Ohio :—

CINCINNATI, Oct. 2, 1851.

Dear Sir :—A thought has struck me—that, at least in the future, we may provide all the railroad iron needed for our country, adding to our prosperity, and saving us from depletion of our currency. I do not know of any point more favorable than your city—having canal and railroads—for carrying iron away. Much is said of disturbance of our financial interests, by large amounts of iron bought of England, which is brought to America, and laid over our own coal and iron. I see nothing suggested, by way of relief. The difficulty will increase, with the increased number of railroads and relaying. Others may suggest something better. Let them do it. I suggest that, so near your city as practicable, a location be selected, affording iron and coal transportation. Let a company be formed composed of none but experienced business men and practical iron manufacturers, with a capital of at least $500,000, and secure a charter next winter, for one purpose only—that of making railroad iron. In addition to which capital, with such men interested in its management and results, let them arrange with various (*responsible only*) railroad companies, to supply them with all the iron they may want, at a stipulated per cent., or duty above the rate of English iron—say present duty of 30 per cent., or at a fixed home price that will afford a certain small and permanent profit—securing from those railroad companies a loan, in the aggregate, of $1,000,000—less or more, as capital may be needed to work with economy and success—the railroad iron company selling those bonds, and thereafter meeting their interest, securing the loan by a mortgage on the Iron Works and the notes of the company. So large an amount of capital will give this Iron Co. a responsibility and credit to negotiate the bonds to good advantage, which they may receive for iron sold new or old companies. This credit is essential. It might be well, as an inducement to secure a loan of the railroads, to allow them a dividend in common with other stockholders, or instead thereof, a certain bonus annually, or iron at lower rates to them than to transient purchasers.

I think some such measure practicable, and it would make a city of itself almost, where works were situated. Think of it among your friends. Some central section in this state should soon adopt it. Let me hear, after you talk of it.

Yours Respectfully, *

To be frank, we think the scheme of our friend objectionable, and impracticable, for many reasons. In the first place, railroad companies should never travel out of the sphere of their legitimate duties. This can never be done, without incurring a loss. Railroad companies are organised for a *specific* object, and those entrusted with the management of their affairs, may have just the qualifications that fit them for their places, while they would make a poor figure in manufacturing iron. The rule is so universal, that railroad companies lose by stepping aside from their legitimate duties, that our best managed companies will not even make their own cars nor locomotives; it being found to be more for their interest to pay a handsome profit to the regular manufacturer than to carry on the business themselves.

In the next place, companies that have their roads *completed*, would not become parties to such a contract, as they would have no inducement to do this. Companies having their roads *in progress*, could not afford to lend money to such a concern; or rather, a manufacturing establishment could not pay the interest that railroad companies pay, and live. Our new projects pay from eight to ten per cent for money, for periods of ten years. A manufacturing company, using their credits, would of course have to pay an equal rate. No establishment making rails can compete with the foreign make, and work upon capital borrowed at such a rate.

Again, the more simple the terms to which contracts are reduced for the purchase of rails, the better for railroad companies. It is much better for them to sell their securities for *cash*, and buy for *cash*, than to effect an exchange in *kind*. It is not the business of the iron maker to negotiate bonds. If he takes them he adds to his price, cost of negotiation, risk of market, etc., etc., which amounts to a much larger sum than the company would have to pay to a regular broker for the negotiation of their bonds.

It is the better plan, after government shall have afforded a reasonable protection, to let every branch of industry take care of itself. There is no lack of capital in this country for every *remunerative* business. We cannot make rails for $25 and $30 per ton in this country, as they do in England, because capital can be more profitably employed in other ways. So with their manufacture in the west. It is the opinion of our best informed iron makers, that the time has not come for the profitable manufacture of rails in the Ohio valley. The higher rates paid for labor and capital there, exceed the cost of transportation from the east. This is the reason why our establishments for making rails are not carried across the mountains. When the western States shall have a surplus population and wealth, they may be able to undersell the east in the article of iron, as they will in other manufactured products.

For reasons above stated, a Massachusetts cotton mill is able, at the present time, to undersell a similar establishment situated in Georgia or South Carolina, in the immediate neighborhood of the latter, although the former has to pay cost of transportation both ways.

Such are some of the reasons for our dissent from the views of our correspondent. But, allowing them to be correct, the remission of duty on rails for new works would not affect his scheme. The demand for rails for roads *in operation* in the west alone, will increase much faster than the capacity to supply them. Neither one, two, nor three rolling mills, will be able to meet this demand. The true way to secure a large and profitable business to our rolling mills, is to encourage railroads,

which increase more than any other enterprises, the consumption of iron.

Journal of Railroad Law.

THE RIGHTS AND LIABILITIES OF RAILROAD COMPANIES IN RESPECT TO LANDS GRANTED TO THEM CONDITIONALLY.

An able opinion of Judge Parker, in relation to this subject, was delivered at the last February General Term of the Supreme Court of the state of New York, at Albany, in the case of *John Nicoll, vs. the New York and Erie Railroad Company;* a case which shows it to be highly important that railroad companies and all corporations, indeed, should fully understand the nature of their land titles, especially in view of the legal consequences resulting from the expiration of limited charters.

The facts of the case, briefly stated, were as follows. A tract of land six rods wide, was originally granted by one Dederer, for a portion of their track to the Hudson and Delaware railroad company, (incorporated to construct a road from Newburgh to the Delaware river), upon condition that their road should be completed before the year 1848.

The condition was not fulfilled, and the road was transferred to the New York and Erie railroad company.

The plaintiff became the owner of Dederer's farm, subject to the rights of the Hudson and Delaware railroad company, and brought an action of ejectment, in order to recover the land in controversy, in consequence of the non-fulfillment of the condition.

But the court held it to be the general rule that conditions in a deed can only be preserved for the benefit of the *grantor and his heirs;* so that in case the land is sold the grantee thereof does not acquire any interest in the condition. From reasons of public justice the law does not favor the assignments of rights of action or rights of entry; consequently a conveyance made by the grantor to a third person either before or after the breach of the condition, upon which the land was originally conveyed, will not carry with it a right to re-enter for condition broken. This rule, however, in the state of New York, does not extend to leases in fee reserving rents, nor to *leases for life or years.*

But although the Hudson and Delaware railroad company was created only for fifty years, and consequently could only enjoy the land granted to it for fifty years; yet as the deed of Dedeer*ron its face* conveyed to them a fee, the court considered that they actually purchased from him a fee in the land in dispute and not a mere estate for years.

The portion of the decision relating to this point seems to us well deserving of being cited at large.

"The kind of estate conveyed by a deed cannot be ascertained by a reference to the length of time the grantee has the ability to enjoy it. If so, every estate conveyed to an individual by deed, in terms plainly expressing a fee, would be but a life-estate, because the grantee's term of enjoyment must necessarily be limited to his life.

There can be no doubt of the power of the Hudson and Delaware railroad company to purchase and hold lands in fee. Its charter expressly conferred the power to purchase and hold all the real estate which might be necessary and convenient in accomplishing the objects for which its Act of Incorporation was granted. This did not mean that they should only take an estate for years, but it authorised them to purchase in fee. It is under such provisions that land is purchased by a railroad company on which to make erections for depots and other purposes; and it is under a like provision that banks whose charters are generally of a limited duration, purchase and hold land for the erection of a banking house. Corporations limited in their duration may not only purchase and hold in fee, but they may sell such real estate when they shall find it no longer necessary or convenient. The people, *vs.* Munson, 5 Denio 289, 2 Kent 281.

Corporations have a fee simple for purposes of alienation, but they have only a determinable fee for the purposes of enjoyment. On the dissolution of the corporation the *reversion* of the real estate purchased by them belongs to the original grantor or his heirs; but the corporation may defeat the possibility of a *reversion* by an alienation in fee. 5 Bingham *vs.* Weidermax, (1 Comstock R. 589); Angell and Ames *vs.* Corporations 129. The statute 2 R. S. 509, gives to every corporation the power to hold and to convey such real and personal estate as the purposes of the corporation shall require, not exceeding the amount limited by its charter. This is clearly a power to hold, purchase and convey in fee."

Judgment was ordered for defendant.

The Iron Interests of the U. S.

The Boston Journal, in an article upon this subject, says:

There are few minerals more widely diffused and none of greater value than iron. The ore of this metal is found in almost every State in the Union. Other States, however, contain the ore in less abundance. It has been estimated that in Ohio, 1200 square miles are underlaid with iron, which tract is calculated to contain 1,080,000,000 tons. In Maryland, Tennessee, Missouri, Kentucky, Virginia and other States, the ore is found in abundance. And yet with all the lavish bounty of nature in this respect, we annually import not far from $10,000,000 worth of iron in the pig, or manufactured by rolling.

Great Britain is the greatest iron producing country in the world; her annual production being estimated at 800,000 tons. Five years ago the United States produced the same amount. In 1850, according to the census returns, only 564,752 tons were made. This decline in production is in a great measure attributable to the reduction of the duty under the free trade tariff of 1846. The cheapness of foreign iron in our markets sets at defiance the competition of our own miners and manufacturers Some idea may be formed of the great loss which has resulted from the abandonment of the policy of protecting our own producers, by the examination of the statistics of the iron manufacture of Pennsylvania. There are 304 blast furnaces and bloomeries in the State, with a capacity of making 550,959 tons. The number of forges and rolling mills in the State is 200, with a capacity of making 224,650 tons per annum. Their total product for 1847 was 202,727 tons. In 1849, the production had fallen off to 136,853 tons. The capital invested in the above mills amounts to not far from twenty millions, and the deterioration must be at least 50 per cent. Probably not half so many laborers are employed now in the manufacture as were employed in 1847. These facts show the extent of the existing depression in the iron business of the country.

It is doubtless a matter of supprise with many, how it is that so heavy, and yet comparatively cheap an article as iron can be produced in Great Britain and sold in this country, after paying duty, freight and commissions, at a less price than it can be afforded from our own mills. The answer is obvious. We have the skill, the fuel, the facilities for reaching a market, and every other requisite for the production of iron which is to be found abroad—except cheap labor. Labor enters largely into the process of iron making, and laborers can be obtained by the iron masters of Scotland at from 24 to 36 cents a day.

In England from 32 to 48 cents a day is paid. In this country the wages of common laborers is from 75 cents to $1 per day; the average being about 80 cents a day. Here is a difference of about 100 per cent in favor of the British manufacturer, enabling him to produce iron at a cost of only about $10 per ton, which cannot be manufactured here for perhaps twice that sum.

It follows that without judicious protection or a great reduction in the wages of the laborer, the iron interest, like many other branches of manufacture, must continue depressed.

Fort Wayne and Chicago Railroad.

We recently published the proceedings of the primary convention held at Warsaw on the 14th ult., composed of delegates from Philadelphia, Pittsburgh, Ohio, Illinois, and all the counties in Indiana through which this road is intended to pass. The directors chosen by the convention convened at Warsaw on the 24th ult., and effected a complete organization of the company, by electing Samuel Hanna, of Fort Wayne, President; J. R. Straughan, Chief Engineer, and A. M. McJunkin, Secretary and Treasurer. A better selection could not have been made. Arrangements were also made for opening books for the subscription of capital stock to said road, along the line thereof. A corps of engineers will be immediately organized, who will proceed at once to survey and locate the whole line of the road, and make estimates of the cost of construction, etc.

It is the intention of this company to adopt measures for the immediate prosecution of this great work, as soon as the preliminary arrangements can be made; and from the well known experience, energy, and perseverance of those gentlemen who have taken it in hand, as well as from the great importance of the work itself, the public may rest assured that it will be pushed forward as vigorously and completed as speedily, as any other work of the same magnitude which has ever been undertaken in the United States.

This is the last link that remains to be provided for in the great chain of direct communication between Philadelphia and Chicago—the great depot of the north-west. That it will be emphatically *the* line between the central seaboard and the north-west—the great *through route*—no one, who will examine the maps of the intervening States, can for a moment, doubt. It must be eminently a *paying* road of itself; but as a continuation of the three great lines of road that already stretch from Philadelphia to Fort Wayne—as the link that connects them with Chicago, and the numerous lines of railroad that centre in that city—it is absolutely indispensable to them. Its completion would double the business of these roads at once, as well as secure to Pittsburgh and Philadelphia the lion's share of the great north-western trade, nearly all of which now goes in other directions. To these roads and cities, the Fort Wayne and Chicago road is of vital importance. They cannot let it *drag* for want of means—self-interest forbids it—and we are assured that if the citizens along the line will put their "shoulders to the wheel," Hercules will not be called on in vain.

We notice, by some of the Philadelphia papers, that that city is apprehensive of a diminution of trade from the roads projected by New York on one side and Baltimore on the other. Let her lend efficient aid to the Fort Wayne and Chicago road; and besides making an investment that will pay a *better* per centage, in connection with the rest of the chain, than that of any other road in the west, if not in the east, she will open a highway that will throw the largest share of the immense trade of the north-west, into her lap—a trade of which she has heretofore enjoyed but little, if any, and which can never be diverted from her by any lines that may be projected by New York or Baltimore. When these lines of road are all completed from Philadelphia to Chicago, the Central and Southern Michigan roads will hardly be felt as competitors. The distance from Chicago to New York, by either of them, will be considerably greater than from Chicago to Philadelphia, by this; besides involving the necessity of several transhipments.

The two western links of this great chain—the Ohio and Indiana road, of 132 miles; and the Fort Wayne and Chicago road, of 180 miles,—will be much nearer straight, and of much lower grades, than any other line of road of equal length in the United States; and the whole is intended to be built

and equipped as a first class road.—*Fort Wayne Times.*

Illinois.

Chicago and Mississippi Railroad.—The managers of this road invited its friends, the leading citizens and the members of the city governments of Alton and St. Louis to a festival and excursion over the road between Alton and Springfield on the 7th inst. An ample collation was provided on the occasion. Benj. Godfrey, Esq., President of the road, presided. We copy the following notice from the St. Louis Intelligencer.

The road from Alton to Springfield, Illinois, is 72 miles in length, and in the absence of official data, we estimate its cost, as at present equipped, at $1,250,000, or a fraction over $18,000 a mile. The country through which it passes is very level—peculiarly adapted to building a road at a small cost.

It runs through the counties of Madison, Macoupin, a portion of Morgan and Sangamon, which is one of the finest agricultural regions of Illinois; and it is designed to extend it to Bloomington in M'Lean county, and thence northeast to connect with Chicago. We assume this connection will be made within two years or less from this date.

To the untiring exertions of Benjamin Godfrey, Esq., the projection and completion of this road may be attributed.

This road is but the *practical* beginning of the great system of railroads projected by our brethren of Illinois, and the completion of which is to develop the resources of a State not excelled in the richness of her soil by any number of consecutive acres on the globe. Talk of mines of gold—*these*, history teaches us can be exhausted by the labor of man, but the *earth* of this magnificent State, cultivated by man, will feed almost countless millions when the treasures of California, like those of Mexico, will only be known by the truth of history.

Illinois has now a population little short of a million, and if she goes on increasing in the same ratio she has the past ten years, in 1860 her population will exceed 1,600,000, and probably by 1870 two and a half millions. With the soil of Illinois and the labor of this population, she can furnish the markets of the world with breadstuffs.

But the Iron road must transport *cheaply* the prodncts of her soil to market, and this will be done when the great chain of railroad now projected, from the centre to the circumference of the State, is completed. We may be deemed extravagant, but we firmly believe, as the result of the wise laws passed by the Legislatures of Illinois within the past two years, that this State will be, in point of population and wealth, second only to one State in the Union in 1870.

The Railroad across the Isthmus of Suez.

The railway works have been greatly advanced within the last few weeks, and eight thousand men are now employed in throwing up the embankments along the shores of lake Mareotis, the coast line of which it traverses for twelve miles, or nearly its entire length. The foundation has proved more secure than was expected, and it is highly probable, from the exertions that are being made, that by the end of 1853, trains will be passing with passengers and merchandise, between the Mediterranean at Alexandria, and the Nile at Kafi-Lais. This surmounts, at all events, the grand difficulty in the transit—the navigation of the canal.

By the 1st of January, 1854, there seem just grounds for hoping that the communication will have reached the capital; and if the Viceroy is prosperous and supported, it is highly probable he will order its continuance thence to the Red sea, at Suez.

There has been great difficulty experienced lately in reaching the terminus recommended by Mr. Stephenson as the line crosses some trifling property of Europeans, and they are taking advantage of the necessity to demand the most exorbitant values. In fact, so much disgusted is the Pacha at their rapacity, that he threatens to cut off that portion altogether, and connect it with the granaries and shunahs by a circuitous tramroad. It is very sad that the first check in the introduction of this first European work is to be received at the hands of those who may, for some time, at least, be the largest gainers from its advantages.

Mr. M. A. Borthwick, the superintending engineer of the works, is very indefatigable in his exertions to further the completion of them; and he is fortunate in having for his assistants a staff of spirited and energetic men. The contractor for the bridges and culverts is soon expected out from England, and we hope his portion of the work will be advanced with equal energy and success.

Illinois.

Sale of the National Railroad.—So much of this road and its materials, as belonged to the state of Illinois, was sold on the 1st inst. to the highest bidder, by the Auditor of State, in pursuance of an act of the last legislature.

The stone of the line of the road was sold to the Terre Haute and Alton railroad Co., for $2,050.

The line of the road between the west line of Putnam county and Terre Haute, was sold to Curtis Gilbert and Ralph Wilson for $225; and the line of the road from Terre Haute to the State line was sold to Curtis Gilbert for $5, making $230 for the whole line—about 27 miles. This closes the connection of the state with all works of internal improvement.

Rock Island and Chicago Railroad.—This road is now completed from Chicago to Joliet, and the first locomotive made a passage over the line on the 9th inst. This is one step forward towards the rising commercial importance of Chicago, and the rich and flourishing state of Illinois.

Central Military Tract Railroad.—The Galesburgh News Letter states that the stock of this railroad has all been taken, and the books closed on the 21st September last. Since, there have been many applications for shares. A short time ago there were over one hundred thousand dollars worth of shares in the market, now there are none to be obtained, except at a premium. An effort is made to increase the amount of the capital stock of the company. If the work *can be done* in that time, the road will be put in running trim by or before the 15th of October, 1853.—The road is to be graded and ready to receive the ties by the 1st of March. The iron is expected to be on hand in May.

Belleville Railroad.—This road was formally opened on the 2nd instant. We learn that there was great rejoicing among the citizens, and that a large crowd was present. The president and others made speeches on the occasion, and among them Edward Wyman, Esq., now a director of the road, made a most capital off-hand address. The location of the whole line of the road has been made from Illinoistown to Belleville, and the depot at the latter place secured. It will be pushed torward with great energy, and doubtless completed before the 1st of August of the coming year.

Belleville may now soon be ranked as *the* great manufacturing town of Illinois. With coal in abundance, within almost her corporate limits, and the terminus of the railroad as her market, she is destined to go-ahead rapidly.—*St. Louis Intelligencer.*

Pennsylvania

Susquehanna Railroad Company.—At a meeting of the stockholders of the York and Cumberland railroad company, held on the 5th inst., at Calvert station, the following named gentlemen were appointed a committee to make arrangements to procure subscriptions to the stock of the Susquehanna railroad company, viz:—Robert M. Magraw, P. H. Sullivan, Michael Herr, Dan. Holt, Henry Tiffany, Alex. Fisher, Enoch Pratt, W. F. Murdoch, Wm. Bose, and Zenos Barnum.

Baltimore and Ohio Railroad.

TWENTY-SIXTH ANNUAL REPORT.

The President and directors of the Baltimore and Ohio railroad company, present to the stockholders their last annual report, prior to the completion of the great work which has been entrusted to their charge. In accordance with the promises heretofore held out, they now have it in their power to announce that on the first of January next, a continuous chain of railway communication, three hundred and eighty miles in extent, will unite the city of Baltimore with Northern Ohio, the Ohio and Mississippi valleys, and the vast and productive region, to which, for twenty-six years past, their attention has been steadily directed—in the prosecution of this stupendous enterprise.

1.—OF THE MAIN STEM.

The operations of the past year have been attended with results far more satisfactory than had been anticipated, from the rivalry of other works, whose completion, or advanced progress, had given them a temporary advantage over this road.

The revenue from all sources during the year, has amounted to $1,325,563 65, showing the small decrease of $23,659 10 as compared with the results of the last fiscal year. Of this amount $314,914 47 have been realized from passengers, $60,740 from mails, and $949,909 18 from merchandize.

The aggregate receipts from both roads show an increase of $15,427 91 over the year ending 30th Sept., 1851.

The expenses of the road have been $710,179 22, which deducted from the gross earnings as above stated, will show the net earnings to have been $615,384 43.

The board have declared a dividend in stock of seven per cent., payable on and after the 25th of November next.

The above exhibit would make the net earnings equivalent to about 8⅞ per cent on the original capital of $7,000,000.

The stock of the city of Wheeling will be entitled to a dividend at the same rate, from the time of subscription by said city. This the board have deemed a legitimate charge to the account of construction—the money having been subscribed with a view to the new road west of Cumberland.

It will be perceived by the tables accompanying this report, that the revenue earned during the year, has been derived in the main from the local travel and resources of the road; a fact which cannot fail to give confidence in the results of the work when completed and in operation to its point of destination.

It is worthy of note that since May last, the revenue of this road has been steadily increasing, and the closing month of the fiscal year showed an advance greater than had been realized during any one month of its operations—the revenue being, from the main stem $157,571 55, and from the Washington Branch $34,953 93 an aggregate of $192,625 48, on the main stem and its branch.

In May the increase was $49,505 94; in June $23,008 70; in July $11,973 89; in August $14,543 54; and in September $31,204 16.

It is confidently expected that the revenue will now go on steadily to increase, until the opening of the road to the city of Wheeling.

The suspension of the coal trade, during the past winter, owing to the failure of the Maryland Mining company, operated most disadvantageously to the receipts of the year, in addition to which, reductions in the tariff have been made, in order to meet the rivalry of other works, which have largely curtailed the aggregate of net earnings.

But for these, and other extraordinary contingencies, the net earnings would have shown a handsome increase over the fiscal year ending on the 30th Sept., 1851.

The expenses of the road, on the other hand, have been increased, by losses, occasioned by a fire at the Mount Clare Station, consuming much valuable property, including the patterns of the machinery department, estimated at $13,468 08, after deducting the amount of insurance recovered; and the unprecedented freshet of April last—deranging the track and destroying property to a considerable extent, at different points upon the road.

Liberal expenditures have also been made, in view of the early opening of the road, which are

extraordinary in their character; but which will have gone into the expense account.

That portion of the cost of the work, done on the road west of Cumberland, by the road department, after it had passed from the hands of the Chief Engineer, which was necessary to place the work in safe and permanent condition, such as ballasting, grading, adjusting, etc., etc., has been charged to account of construction.

The present condition of the road is nearly all that the board could desire. The extended line from Baltimore to Cumberland is reported to be not only in a state of good repair—equal on the whole to what it was represented in the last annual report, but may be said to have improved in many essential particulars. The purpose of the company has been, to guard against the extraordinary outlays consequent upon a postponement to the future, of the repairs necessary to prevent deterioration; and this policy has been the more strongly urged, in consequence of the heavy outlays to which they have been subjected, in bringing their road to its present advanced stage of improvement. A road to be kept in repair in perpetuity, must be carefully watched and liberally treated, and the stockholders will find in an average of years, that the course of true economy is, to prevent decay, by a prompt application of the remedy, before a general breaking up renders a more serious effort indispensable to preserve its existence.

The board feel that they are entitled to some indulgence, in the relation which their expenses have heretofore stood to net revenue. They have not only been subject to the direct and ordinary outlay, necessary to ensure the safe transit of passengers and freight, common to all roads; but they have been compelled to incur a much larger expenditure than would have attached to a road in the sound condition of their own at the present time. They have been obliged to substitute a new track of some twenty miles for the old plate rail track, which they found in a state of depreciation, such as to render its repair inexpedient; they have increased their sidings to an extent of more than ten miles; they have renewed their bridges at a cost in some instances almost equal to the original estimate for such structures; and they have been subjected to a heavy outlay for enlargement of water stations, and other necessary appendages, rendered indispensable by the enlarged prospect before them. They have in fact extended the capacity of the road, from the contracted limit in which they found it four years ago, to one capable of meeting with but slight embarrassment the demands of the increased trade which is soon to be developed; and this without a dollar's increase of its original capital, by the issue of new stock, based upon the road *East of Cumberland*, and without encroaching upon a saving dividend to the stockholders.

The board deem it more than just, that this view should be presented, now that the work is about to be completed; notwithstanding they have continued regularly, to make dividends in stock out of their net revenue, after deducting these extraordinary demands upon them; and have never failed, during any year of their operations, to show a favorable exhibit in comparison with other roads, having few, if any, of these obstacles to contend with.

The Station at Mount Clare has gone on steadily to improve. It is now well supplied with work shops, engine houses, and other buildings for a very large trade. Its stationary machinery has also been increased to a considerable extent, in view of the greater activity which must soon attend the operations of the repair department. With those who have known its condition and limited capacity in former times, its present appearance and greatly extended facilities, will not have escaped observation. The number of mechanics and others, now employed at this Station, is upwards of one thousand.

At Martinsburg a large expenditure has been incurred, in the purchase of grounds and the construction of shops, engine houses, and other necessary buildings, required by the prospective wants of the road; and at Cumberland considerable additions have been made to the facilities heretofore afforded at that point.

The results of the transportation department, show no abatement in the skill and promptness with which it has been conducted. It is a remarkable fact, that for four years past, not a fatal accident has occurred to any passenger travelling on this road, and the records of the courts will show a most singular exemption from the litigation usually attendant upon works of such magnitude. It has been the unceasing effort of this company, at all times, to make their road an *accommodation* to the public, and they have spared no pains in bringing into their service, officers of gentlemanly deportment, character, and reliability, who would feel the weight of their responsibility both to this company and the public. The board take pleasure in expressing the belief, that no road in this country presents a more complete or efficient organization.

The present condition of the road is such, as to admit of a rate of speed, much greater than that which the company have adopted. Independently, however, of what is due to safety, the effect of a too rapid motion in the passage of the trains, in the wear and tear of the track, has been to limit the rate of speed both in the tonnage and passenger trains, to about ten miles an hour for the former, and between twenty-five and thirty for the latter.—The regularity with which the business is conducted at these rates, and the exemption of the road from accidents, abundantly attest the wisdom of the policy which has been adopted.

The limited accommodation which it was found convenient to furnish, without interference with the wants of the Machinery Department, at the Mount Clare Station—its remoteness as a place of delivery—and the necessity for maintaining an expensive horse-power, for both the passenger and tonnage operations of the road—warned the board of the importance, at an early day, of a transfer of their business to some more convenient and central location.

This had been rendered the more imperative, in consequence of the utter inability of the company to provide for its present trade, without serious inconvenience.

Accordingly a purchase was made of three entire squares of ground, between Eutaw and Howard streets, bounding on Camden street, north,—Lee street, south, and comprising a length of about 1,100 feet, including Conway and Barre streets, which the company have the privilege of arching, and a width, between Howard and Eutaw streets of 330 feet.

No act of this board, it is believed, has been received with more favor by the entire community, than the location of this noble station—holding out the advantages that it does to the whole city—and comporting so admirably with the vastness of the enterprise, whose accumulated treasures it is destined to receive.

The board might well have hesitated in meeting the expense of so heavy an investment, at a period when they had so many and pressing demands upon them; but when they considered that the results of their own great work would be to place such an acquisition at any future day, after the 1st of January, beyond the limit of their means; and that it involved the immediate abatement of the tax for horse power, which during the fiscal year had reached $47,543 42, and would have been quadrupled on the opening of the road to the Ohio river; they could not hesitate as to their duty in such an emergency.

The cost of the new station, when complete, will fall little short of $500 000, the interest of which will be more than met by the tax on horse-power, upon the limited basis of trade during the past fiscal year.

The board are happy to state that every facility has been afforded by the corporate authorities of the city of Baltimore, in the location and establishment of the new station; and the privilege of locomotive steam power was allowed them, by such approaches as were deemed most convenient and advantageous.

The board would state further in connection with this subject, that they have disposed of their old station on Pratt and Charles streets, for the sum of $80,000, deducting the ground rent to which it was subject.

By the agreement of July, 1847, the city of Wheeling stipulated to furnish, free of charge, with the right of way through her streets, a depot on the north side of Wheeling Creek, comprising not less than two acres. A point immediately at the mouth of the creek was deemed advantageous for this purpose—but a difference of opinion having arisen between the city and the company, as to the proper location, a compromise was made, by which the company, on the privilege being conceded to them of laying down certain tracks, and using a portion of the property belonging to the city, was enabled to secure all that could be conveniently compassed for the accommodation of both their passenger and tonnage business. No other location could have been made which would have been more advantageous to the interest of both the city and the company. The total cost of the depot grounds, including the right of way, will amount to $78,000, of which the city of Wheeling paid $50,000, and it is estimated that the company will realize a large amount of the excess over $50,000 paid by the city of Wheeling, by sales of portions of the property not needed for the purposes of their depot—and which will not be greatly enhanced by the presence of this improvement.

This station is situated immediately on the banks of the river, and will afford the amplest facilities to the entire water front, as well as other business parts of the city.

Early in the month of May last, the subject of the equipment, necessary to accommodate the probable trade of this road, on its completion to the Ohio river, was referred to the committee on Construction and Repairs, with power to make the amplest provision for any contingency that was likely to arise. But one opinion prevailed in this community, as to the necessity for enlarging the former estimates of the chief engineer and general superintendent, in their report upon this subject, to an extent greatly in advance of what the board had deemed to be requisite, at so early a stage of their operations. They did not see, however, that they had any right to run the risk of being found deficient in the means of transportation; and the experience and calculations of business men engaged in the various departments of trade, left no doubt that the course of prudence imperatively required the most liberal policy in the equipment of the road, both for its passenger and tonnage operations.

The special report of the general superintendent, herewith annexed, will shew the basis on which the board have acted in their orders for machinery and cars.

It will be perceived that the estimates of that officer have been based upon a conjectural aggregate from all sources of $4,092,500 of revenue. The provision thus made cannot fail, it is believed, to be ample in any contingency, especially as that officer does not estimate for *night* work, which in cases of pressure and emergency might be resorted to.

The cost of the additional power thus ordered, exclusive of the cars and engines provided for in the company's shops, will amount to $937,800, and the outfit of the company in engines and cars, including the stock heretofore furnished, will be as follows:

		First Class Standard.
1st class	burden engines	86—86
2nd "	" "	5— 3
3rd "	passenger and freight	17— 8½
4th "	freight engines	19— 7½
1st "	stock "	9— 9
1st "	passenger "	3— 3
		139 117

Passenger train cars including baggage, mail and express cars. Total..... 96
Burthen cars of all kinds.....2,567

Total.....2,663

The whole of this additional power is contracted to be delivered upon the road, on or before the first January, or shortly thereafter.

No road in this country has commenced operations with a more ample equipment; and the stockholders might well compromise for far less encouraging results than are here indicated, and for which out of abundant caution, the amplest provision has been made.

The dependence of this road for the present, to a great extent, upon the navigation of the Ohio river, induced some anxiety, at an early period, on the part of the board, in reference to the prompt accom-

modation of the travel destined for Cincinnati, St. Louis, and other points beyond its western terminus. Pittsburg for many years past has had the advantage of a daily line of packets running regularly between that city and Cincinnati. To have opened this road, without facilities, at least equal to those enjoyed by a rival interest, so far as the river navigation is concerned, might have been attended with serious drawbacks, and tended to neutralize the otherwise decided advantages which the Baltimore route will be found to possess, both as to time and distance. In ascending the Ohio river, the passenger is one day nearer to Wheeling, than he is to Pittsburg, and the time consumed in the transit between those cities, would place him in Baltimore in almost the same time he could reach the latter city. The importance then of a line of boats working in connection with this road, and regulated by its time schedule, was deemed of sufficient interest to engage the earnest attention of the board.

The board are happy now to be able to state for the information of the stockholders, that a company has been organized, under a charter passed by the legislature of Virginia, and arrangements made by which this difficulty will be effectually obviated.

A daily line of boats, of a class superior to any that have yet floated upon the western waters, is in rapid progress of construction, and will be ready by the 1st of January, to run in connection with this road.

Tnese boats measure 300 feet in length—combine all the modern improvements—both as to model and machinery, and the appointments necessary to the comfort of passengers; and will be under the management of the most experienced and skilful officers.—They will run daily between Wheeling, Cincinnati and Louisville, and will so regulate their time of arrival and departure, as to fall in with the movements of the cars running over the Baltimore and Ohio railroad, between Wheeling and Baltimore. With these facilities which may be held out by this line, it is not doubted, that the through travel will be greater than that of any other road in this country, at those periods of the year when the river is in a navigable condition.

II.—OF THE COAL TRADE.

The coal trade has not developed during the year with the rapidity that was anticipated at the date of the last annual report. Nothing has occurred, however, to shake the confidence of this board, in the opinions heretofore expressed, not only in reference to the value and superiority of the Cumberland coal, for steam and manufacturing purposes, but the point at which it must concentrate, and which will be found most advantageous for distribution on the seaboard, in its transit to more distant markets. The aggregate transported during the year has been 206,290 tons; of which 25,794 tons have been consumed in the operations of the road. This amount would have been greatly increased, but for the failure in October last of the Maryland Mining Company, and the almost total suspension of the trade from that time to April 20th, owing to the confusion resulting, in the main, from this untoward event. The demand for the article was also greatly interfered with, by the prevalence of high freights, and the existence of the heavy pilotage, which has heretotore operated so disadvantageously to this department of trade.

The board are happy to announce, that these drawbacks have ceased to exist, and the demand for cars on this road has exceeded what it has reached at any former period; and is at this moment limited only by the capacity of the company to provide the means of transportation.

No subject which has heretofore occupied the attention of this board, is of graver interest than that of the coal trade at the present time, and this company have at no period hesitated as to their duty, in forwarding, to the extent of their ability, what they believed to be the true interest of the State, the city and the stockholders, in this connection.

The mineral region of Alleghany belongs to the State of Maryland; and the development of its wealth and resources is a matter which can never be lost sight of by those representing her interest in this road. Apart from the more expanded view which this board feel bound to take, the idea of a concentration of the coal trade at any point beyond the limits of the State, is one which has never been entertained. The city of Baltimore, contributing one half to the taxes of the State, and representing nearly a moiety of the stock in this road, must be the legitimate recipient of whatever incidental benefits this trade may be expected to produce, and the State at large will add to her manufacturing and mechanical pursuits, and the growth of her population and wealth. Those who could look with indifference upon the importance of the coal trade to the city of Baltimore, and its possession by the District cities, may profit by the experience of Philadelphia, and her connection with the public works and mineral region of that State.

The board have reason to believe, from applications now before them, that an amount exceeding 500,000 tons of coal, could be disposed of during the coming fiscal year—and there are parties believed to be reliable, who would be willing to guarantee a steady transit of from 1,600 to 2,000 tons daily. The demand for this coal has been increased, by the reduced rate at which it is furnished, owing to the abatement of 25 cents in the transportation, some 15 cents pilotage upon vessels seeking our harbor, and the destructive effect of anthracite coal upon the machinery of vessels, which have been compelled to use this fuel on account of the difficulty of procuring any other.

In the application now pending for an increase of facilities over this road, it is understood a decided preference is expressed for the Baltimore market; and no attention will be given to other channels of communication, until the inability of this company, to afford the requisite accommodation, shall be clearly established.

In view, then, of the importance of this trade, both to the company and the city of Baltimore, the board will find it necessary, at an early day, to deliberate upon the policy proper to be pursued, in order to meet the increasing demands which are likely to arise. The subject will involve considerations looking beyond the mere expenditure for additional cars and machinery. The vast trade of the west will tax, it is believed, to the fullest extent, the capacity of a single track, after its opening on the first of January. Extensive sidings will be indispensable; and it may be, with the announcement of the settled policy of this company, to give encouragement to the coal trade, a twelve month will scarcely elapse, before provision will have to be made for a second track from Baltimore to the mineral region.

The subject is one of sufficient gravity to invite the most liberal interchange with the stockholders, in reference to the course proper to be pursued. With the board there can be no hesitation. The amount of coal which might be transported over this road during the coming fiscal year, if the company were in a situation to invite trade to the fullest extent, would produce a gross revenue of more than $1,000,000—an item which may well illustrate the value and resources of this great work, and its probable results at some not distant day.

In any arrangement, however, which may be made, in reference to an increase of accommodation, the board must keep a steady eye to the *actual wants* of the trade, and guard the company against the possibility of re-action, or a curtailment of the demand, which could in any manner interfere with the full employment of such power as may be provided, and the regularity of their operations, on which the maintenance of the existing low rates of toll must always so mainly depend.

Among the applications now before the company is one from the Cumberland Coal and Iron company, for 1,000 tons per day, to be increased hereafter as the convenience of the company may justify. The Frostburg company have applied for a daily transit of 500 tons. The Bordon company are now transporting 200 tons, and all other companies say 250 tons.

This trade, it is perceived, is wholly independent of the vast coal field, which is about to be penetrated by the George's Creek railroad, now in rapid progress of construction—and which will connect with this road in the vicinity of Piedmont. These operations, so far as the company are enabled to judge, will be placed upon a sound and permanent footing, and will give the most active employment to the machinery and power of this road, at periods of the year when other roads depending upon a mixed traffic, are more or less inactive.

The results of their past operations fully encourage the maintenance of the low rates which have been adopted, and the board feels no desire, at present, to disturb their existing tariff. This road is not dependent upon its coal trade alone—with the power to control a traffic in this single article—almost as extensive as that of the Reading road—they have other sources of revenue upon which to rely for their profits; and in the multiplicity and vastness of their resources, coupled with the mere nominal rates at which fuel may be procured, at almost every station upon their line, they do not hesitate to express the conviction, that the expenses of transportation will always compare favorably with any other road in this country.

Connected with this subject of the coal trade, the stockholders were apprised in the last annual report, of a plan then in contemplation, to organize a line of boats to ply between this city and New York, at regular stated intervals. The board are happy to announce, that this plan is about to be carried into effect by the Cumberland Coal and Iron company; and may be expected to add greatly to the facilities of the Baltimore market, in its connection with the coal trade, as well as the westward transportation which will be carried on by means of this line.

The board feel encouraged at the reasonable prospect of securing to the state of Maryland and the city of Baltimore, the benefits of this important trade.—They have found in it their most certain and reliable resource, at times when they have felt most severely the rivalry of works, whose advanced progress had given them a temporary advantage. But apart from the direct interest which they have felt in the possession of so important a trade, they could not, without a struggle, at any time, witness its establishment beyond the limits of the state of Maryland, to which it belongs, or her great commercial centre, whose wealth and prosperity and the activity of whose industrial classes, it must so largely contribute to advance.*

III.—OF THE WASHINGTON BRANCH.

The operations of the Washington Branch have been conducted with their usual results.

The receipts from passengers, mails and merchandise, have been $348,622 76, showing the handsome increase of $39,087 01, over last year. The expenses have been $132,385 31, a decrease of $14,295 85 in this item.

The net revenue is thus shown to be $216,237 45, out of which the board have declared a dividend of four per cent. for the half year ending 30th Sept., payable on and after the 15th inst. This added to the dividend in April last, will make 8 per cent. for the fiscal year.

The bonus of the State during the half year amounted to $31,842 32, and for the whole year, to the large sum of $59,826 69—an interest at 6 per cent. upon a capital of $1,000,000. Her receipts from this road, during the fiscal year, have been more than 18¼ per cent. upon her investment of $550,000!!

The new station at Washington is now entirely completed—and compares favorably with any in the Union, for comfort and convenience of arrangement. The company have been subjected to much additional expense, owing to the roughness of the location, and the necessity for excavation and grading, as well as a heavy tax for improving the streets and avenues communicating with the city.

The passenger trains have been moving with increased speed, and an uncommon exemption from accident, considering the number of miles run.—The steady increase of Southern travel, in the face of the temptation held out by other routes, coupled with its improving local business, show the value and importance of this branch; and its activity will

* Since that part of the annual report relating to the coal trade was prepared, a contract has been agreed upon with the Cumberland Coal and Iron company, by which that company stipulate to furnish capital for an increase of their present coal power to 100 cars per day, say 300,000 tons per annum, and to establish a line of propellers and barges between this city and New York, at a cost not to fall below $100,000, but which may be increased to $300,000, or more.

be greatly augmented on the completion of the main stem to the Ohio river.

Indeed it is now evident that the Washington Branch must always rank among the best paying roads in this country, notwithstanding the heavy bonus to which it is subjected by the State, and which must operate as a serious obstacle to the accommodation and fostering of the travel, by the adoption of low rates of fare.

To be continued.

American Navigation.

We copy from the Boston Post the following summary of American Navigation at three important periods.

In 1789, at the end of the period of the confederation, American Navigation was in a very depressed state. Its amount of tonnage was as follows:

Engaged in foreign trade	127,329	tons.
" Coasting trade	68,607	"
" Fisheries	9,062	"

After the adoption of the Constitution, one of the earliest measures of the new government was the imposition of discriminating duties on foreign bottoms and goods imported in foreign vessels. This policy, and the great conflicts between the maritime powers of Europe, stimulated greatly the navigation of the United States, and threw a large share of the carrying trade of the world into the hands of the Americans. In twenty years our tonnage had increased astonishingly. In 1807, it was as follows:

Engaged in foreign trade	1,116,241
" Coasting trade	285,090
" Fisheries	95,744
Total	1,477,075

At this period began the aggressions of the Berlin and Milan decrees, and the British orders in Council leading to the embargo and non intercourse acts and finally to the War of 1812.

A few contrasts will indicate our immense maritime progress. We set up now more tonnage yearly than the total amount of American tonnage in 1789, for then the total tonnage afloat was 200,000, and last year the total tonnage built was 298,203.

But another contrast will show this progress still more marked—the contrast of the American marine with that of Great Britain. In its seventy years existence as a peaceful nation, the United States has run up its tonnage to within 300,000 tons of the most powerful of modern nations, whose flag has waved a thousand years; for the tonnage of the British empire in Dec., 1851, was only 4,332,085 tons; while it is a fact that the United States, for several years past, is going ahead of Great Britain in the quantity of tonnage annually set up. Here is a table showing the tonnage of the new vessels built the three last years in the two countries:—

Year.	Great Britain. Tonnage.	United States Tonnage.
1849	245,130	256,577
1850	262,483	272,218
1851	275,139	298,203

To show the contrast between the tonnage of 1789, which we have quoted, and that of to-day, take the statistics of the last five years; giving the total tonnage and putting together all the tonnage engaged in the fisheries.

Years.	Total tonnage.	Fisheries.	Coasting Trade.
1847	2,839,045	295,486	1,452,623
1848	3,154,041	318,388	1,620,988
1849	3,334,015	297,009	1,730,410
1850	3,585,454	289,773	1,755,796
1851	3,772,439	319,658	1,854,317

Such is the splendid commercial marine of a country of which it may be said, as it is expressed in Burke's eulogy on its infancy, that it is but yet in the gristle, and has not attained the manhood of its power.

Mississippi.

New Orleans and Jackson Railroad.—The work of grading, clearing, embanking and otherwise preparing eight miles of this road for the reception of the cross timbers and iron rails, was commenced yesterday, under the superintendence of the contractors, Messrs. Coleman and O'Shaughnessy, at a point three miles above the city, on the continuation of the Metairie Ridge. There are some hundred laborers at work, we learn, and the contractors have erected buildings large enough to accommodate 1,500 men.

On the 11th of this month twenty-five more miles of the road will be ready for proposals to clear and grade.

The commencement of this great work, so immensely important to the southwest and to New Orleans, will be hailed by all our readers as the opening of a new era of prosperity and life for this vast section of country. It has taken many years of arduous labor to bring about even this slight opening step, and though no ceremonials of rejoicing accompanied it, a thrill of gratification will touch the heart of every true friend of NewOrleans when he learns that yesterday the first spadefull of earth was turned up on the New Orleans, Jackson and Great Northern railroad.—*N. O. Picayune, 5th inst.*

Philadelphia and the Southwest.

Aid to the Marietta Road.—We stated frequently, (says the Philadelphia Commercial Register), the last few months, the necessity of Philadelphia embarking in the railroad schemes of the South-west, if she desired the benefits of the greater portion of the trade of that region, and keep a rival city from getting control of certain roads in Ohio; and we know it to be a fact, that New York is now moving boldly in view of that purpose, so that we are in danger from her, as well as Baltimore. We are pleased to announce as an offset to this, that the board of directors of the Pennsylvania railroad, by resolution, have determined to send their chief engineer, E. Miller, Esq., to examine the route of the Cincinnati and Marietta railroad, which will, if aided from this quarter, be extended up the Ohio to Wheeling. It is understood to be the intention of the Pennsylvania railroad Co., to extend pecuniary aid by a liberal subscription to such lines of railroad running south-west from Wheeling as may be best calculated to promote the facilities of railroad communication between this city and its south-west market in Ohio valley and points beyond.

Silesian Iron.

The most extensive display of iron, in all the stages of its manufacture, is sent from the numerous forges or *Hutten* of Count Renard, who alone occupies a large portion of the basement of the building. The quality of the metal produced at his works has secured it a local reputation, though other establishments, as the Laura Works, at Beuthen, produce iron in bar and the larger forms in greater quantity. The Renard Works are unrivalled in the finer sorts, and of hoop iron, nail-rods, wire, cast iron for cooking vessels, steel in many varieties, especially forged steel of the finest quality, there is a most abundant supply. Sheet iron is exhibited from these works of such a degree of tenuity that the leaves can be used for paper. A bookbinder of Breslau has made an album of nothing else, the pages of which turn as flexibly as the finest fabric of linen rags. As yet no extensive application for this form of the metal has been found, but the manager says the material must precede the use for it; perhaps books may hereafter be printed for the tropics on these metallic leaves, and defy the destructive power of ants of any color or strength of forceps. We have only to invent a white ink, and the thing is done. Of the finest sort the machinery rolls 7040 square feet of what may be called leaf iron from a cwt. of metal. In point of price, however, the Silesian iron cannot compete with English; much is still smelted with wood, and the coal and iron districts lie at great distances from each, so that much capital is consumed by the conveyance of fuel to the works.—*London Mechanic's Magazine.*

The Great New Orleans and Nashville R. R.

On yesterday Messrs. Hazlehurst and Dayes of the corps of engineers, on the part of the road from Florence to Aberdeen, arrived in our city, accompanied by our President, Chancellor S. Cocke, and Mr. G. W. Hardy. They have made a reconnoisance of the entire way from Florence to Aberdeen, a distance of about ninety miles, and in which are included the hills of the Bear creeks, and the dividing country between the waters of the Tennessee and Tombigby rivers, where were known to exist the only embarrassing difficulties, to the success of the road between New Orleans and Nashville.—They report the ascertainment of a route through that region as entirely practicable for a first class railroad, and at a less grade than 50 feet to the mile, and which can be made at a reasonable cost. They report sixty miles of this part of the road to go through a beautiful level country; and that but a very small portion of the residue involves the necessity for summit cuts to but a very limited extent. The route designated is in four miles of a straight line, and taken as a whole, the road from Florence to Aberdeen can be readily made, so as to be a cheap road.

The route from New Orleans to Jackson has been surveyed, and a portion of it is now under contract. The different corps of survey, from Jackson to Aberdeen, from Nashville to Florence, and from Florence to Aberdeen, are now in the field; and the survey of the entire route, from New Orleans to Nashville, will be completed before the first of December next; the prediction of Mr. President Robb that he would be able to put the entire road from New Orleans to Nashville, under contract of construction by the first of January next, will be more than realized.

We will remind our readers, that this is a part of the great railroad way, from the Northern cities, by the Lakes, to the Gulf of Mexico at Mobile and New Orleans.

We regard it as the most important establishment of the age, and we confidently look to its entire completion within the next three years.

We congratulate ourselves and the country on the prospects before us.—*Aberdeen Independent.*

Alabama and Tennessee River Railroad.

The Selma Republican announces the speedy completion of this enterprise. In a short time, every foot will be placed under contract. Two years have not yet elapsed, and there are now nearly ninety miles of the grading completed and the cars running some thirty-odd miles and by January next they will be in sight of Montevallo, fifty-five and a half miles. At that point the road will be doing a very handsome business. The success of other roads now throughout the South and West, satisfy us upon this point, and we congratulate the stockholders upon the near approach of the rewards of their enterprise. Never before, in the South, was there so good a country subscription as in the case of this road.

Pennsylvania.

Philadelphia, Easton and Delaware Water Gap Railroad.—A meeting was held on the 9th inst., at Sansom street Hall, Philadelphia, in favor of constructing a railroad from that city to the Delaware Water Gap. We learn from the Commercial Register that the *elite* of the mercantile and business men of Philadelphia participated in the meeting. Remarks were made on the importance and necessity of the construction of this railroad by John M. Reed, Esq., of Philadelphia; Hon. J. Madison Porter, of Easton, and John M. Kennedy, Esq.

Resolutions were unanimously adopted, declaring it to be the duty of Philadelphia, in view of the vast trade of the north-eastern counties, and the efforts of a powerful rival, to at once take measures to construct at an early day the Easton and Water Gap railroad.

A committee was appointed to procure subscriptions in that city for building the proposed road.

Baltimore and Ohio Railroad West.

The unremitting vigor characteristic of all the operations of the Baltimore and Ohio railroad company has so far advanced the work of laying their route west of Fairmont, Va., that by the 20th of November, as we are informed, *only fifteen miles* of road will be to finish. That fifteen miles will be the distance immediately east of the mouth of Grave Creek, lying between it and Loudenslager's Mill. Thus on the 20th proximo, the time between Baltimore and Wheeling will be reduced to twenty-three hours, and the price of travel correspondingly lowered.

We learn that on Pettibone's tunnel, on the line between Fairmont and Wheeling, the before unheard of engineering exploit achieved over Kingwood's tunnel, in Preston county, has been surpassed, and that locomotive engines are daily employed in surmounting the ridge through which Pettibone's tunnel passes at a rise of *six hundred feet to the mile*, or one foot in about every eight feet ten inches! Undoubtedly such a feat has been neither performed nor attempted elsewhere in the world.

On the Parkersburg branch from Three Forks, the surveys have all been made, and at some spots the contractors are already at work.

Saut Ste Marie Canal.

The Lake Superior Journal states that Captain Canfield, of the U. S. Topographical engineers, and Judge William A. Burt, arrived by the London on Monday last, and are now engaged in the location and survey of the ship canal around the Ste. Marie Falls. Gov. McClelland has acted with promptness in this matter. Having been over the ground recently, as well as through the mineral region, no one better understands the importance of carrying forward this great work with the utmost energy; and we have no doubt that, with this survey and all the estimates that have been made and those that are now in preparation, he will recommend such a plan for its construction as will most speedily build the canal.

This survey is made under the authority given to the Governor of this state by the Act recently passed by congress, making an appropriation of 750,000 acres of land for the construction of the canal. By this wise provision of the law the exact location, survey and estimate can be made and presented to the next legislature.—This is all that can be done until the legislature meets in January next, when the whole matter in the wisdom of our legislators, will, we trust, be disposed of. It will then be seen whether the canal is to be completed in two or ten years, or not at all by this land appropriation.

Canada.

Northern Railroad.—The directors of this road recently visited the work attended by their engineer. An inspection was made of the Garrison culvert, the Dundas bridge, the Hogs Back culvert, the depot grounds at the Devonport road, and other points of interest along the line, where the party alighted to examine the works and consult upon future operations. Although the track had been severely tried by the storm of the previous evening, and although this was not intended as a trial trip of speed, part of the line was traversed at a rate exceeding 35 miles per hour, and the whole distance (12 miles) was performed in creditable time, both going and returning. The directors on leaving, expressed to the chief engineer their approbation of the general appearance of the road, and issued instructions that every possible effort should be made to open a portion of it for public use at the earliest possible moment. Messrs. Fleming and Gibbard are now engaged in the survey of a new line. The arrival of Mr. Cumberland, the chief engineer, is daily looked for.

A Great Achievement.

There are a few points of especial interest in all great enterprises. In railroad construction, one was the movement upon the track of the first locomotive. Another, was the connection of our great depots of trade and commerce on the Atlantic coast. A third, was the extension of railroads from tide water to the great lakes. A fourth, and perhaps the crowning achievement, will be the connection, by railroad, of the systems of the Atlantic and of the western States, by the opening of the Lake Shore line, which is to be completed in a few weeks more. The crossing of the Alleghenies has required an effort too great, as yet, for our strength. Both divisions of the country have been busily at work expounding and perfecting their own systems, without being able to effect their union into *one*. Ohio has already become, in the extent and importance of her works, by far in advance of any State in the Union, with the exception of New York; and it is now reserved to these two great States first to unite in their respective lines the great divisions of the country.

As soon as the Lake Shore road shall be completed, the area of our railroads will be incredibly enlarged. In the east it is now bounded by the lake and the Allegheny range of mountains. But upon the completion of the Lake Shore road, a traveller may book himself in New York, not only for every important eastern city, but for Cleveland, Sandusky, Toledo, Columbus, Cincinnati, Indianapolis, Louisville, Lafayette, Terre Haute and Chicago, in the west. All these points will be accessible from New York by railroad by the first of December next. In a year more the Mississippi river, which but a short time since was regarded as the *ultima thule* of railroad enterprise, will be reached, and its right bank become the theatre of equally active exertions that we now witness on the left.

We can by no means appreciate the influence that the above connections will exert upon the commerce and travel of the country, and upon the business and revenues of our railroads. Up to the present time our roads have been comparatively *unconnected* links, each dependent for its revenues upon its local traffic. For the future, however, they will all belong to one harmonious system, and all will contribute to the business and revenues of each. We have, therefore, a right to anticipate a very large increase in the receipts upon all our works, which will add in an equal ratio to the value of railroad property, and strengthen the confidence felt in such investments.

The commerce and general interests of the country will be benefitted in an equal degree. The movement of property, which has heretofore been confined to a few channels, from *necessity* not *convenience*, will be liberated from this necessity, and move in the exact direction of the *demand*. Railroads are not only to become the channels of the existing commerce of the country, but they will develop a ten-fold greater one. We have now reached a point in their history, in which the extent of their influence is beginning to be clearly seen and appreciated, in which the *reality* is to far exceed the most sanguine anticipations, and which is fully to redeem all the pledges given by their friends of the triumphal success of these enterprises. At home they are the great agent of our prosperity. They are equally the means by which we are attracting universal attention, and which are to elevate us to the position which we shall soon hold as the most potent people on the earth.

We repeat, therefore, that the union of the railroads of the two great divisions of the country is an event of the highest importance, both in the history of railroads and of this country; and we hope to see the opening of the Lake Shore railroad, which is to accomplish this union, celebrated in a manner worthy the occasion.

Illinois.

Alton and Sangamon Railroad.—From the officers of the Alton and Sangamon railroad, we understand that the travel and traffic which already pass over it, far exceed their most sanguine expectations. The number of passengers has thus far averaged one hundred and ten per day, and the up freight trains have been as heavy as the locomotives could draw. The receipts for the present month are estimated to be over fourteen thousand dollars.

A saloon car, for the convenience of ladies and children, is now in process of erection at the shops of the company, and will be ready in the course of a few days. Also, a *lounging* and smoking car, for gentlemen.

A large number of cattle cars have been received, and will be put together as speedily as possible.—The company are making arrangements for extensive hog and cattle pens, just beyond the limits of the city, and will shortly have ample accommodations for all kinds of live stock.

We are informed the passenger locomotive E. Keating will be up and ready for the road by the first of next week.

The steamer Cornelia will commence her regular trips, in connection with the cars, on Monday.

The prospects of the company are of the most flattering character, and under the energetic and efficient direction of Mr. Keating, Superintendent, the road cannot fail to be popular and well sustained.—*Alton Telegraph.*

Memphis and Charleston Railroad.

George P. Beirne, Esq., resigned the presidency of this road at the meeting held in Memphis on the 13th September, 1852. His place was filled by the election of A. E. Mills, Esq. The following resolution was passed at the same time by the board and directed to be published:

That, should the people of Mississippi desire to construct a railway through the counties of Marshall, Tippah and Tishamingo, under the authority of the legislature of Mississippi, this board will furnish to them every facility for uniting with the Memphis and Charleston railroad at any point, and will interpose no objection to a direct and independent line from the north boundary of the state of Mississippi to Memphis.

Gold and Silver.

The scarcity of silver since gold has been so abundant, is seen in the following statement, showing the comparative amounts of gold and silver bullion in the bank of England at several periods:

	Gold.	Silver.
Sept. 4, 1847	£7,373,815	1,023,035
" 2, 1848	12,167,567	705,938
" 8, 1849	13,641,173	277,077
" 2, 1850	15,883,857	219,958
" 5, 1851	13,674,190	32,375
" 4, 1852	21,334,921	19,154

The amount in general circulation in England, has been much reduced recently by the emigrants to Australia, who have taken out silver in preference to gold. Silver in the colonies is received as a legal tender for all payments, while in England it is only a legal tender for payments of 40s. and under. To lessen this out-going of silver coin to Australia, it is proposed to make the laws in the colonies conform to the parent country. The British government were about to order a large issne of new silver coin. The price of silver, and the alloyed rate of the coinage, pays the government well

for supplying the public with a sufficient amount for circulation. At the last accounts, the market pricefor dollars was 4s. 10¼d. and for silver 6s. 0¼d. while the rate at which silver is coined at the mint into English silver is 5s. 2d.

American Railroad Journal.

Saturday, October 23, 1852.

Ohio and Indiana Railroad.

This road is fast beginning to assume a prominent position among our leading wesrern projects. Both as a connecting link between other important lines and systems of roads, and as a work promising a lucrative local traffic, there are few of the more recent western projects that can lay more claim to the attention and confidence of capitalists and the public. Commencing at the junction of the Ohio and Pennsylvania, and Cleveland and Columbus roads, the former, the extension westward of the great Philadelphia, and the latter of the New York system of railroads, it is the legitimate extension of these lines still further west, to Fort Wayne and Chicago. For Central Ohio, it must be the most convenient route to the great city of the lakes. This fact sufficiently establishes the importance of its through business. Chicago is to be the grand converging point of the railroads of the north west, and bids fair to become the most important interior city of the United States. It must always maintain an extensive trade with, and become a leading point of attraction for, all the western States.

As far as its local traffic is concerned, the road will have no immediate rival, at least for such traffic. It must form the outlet for a very extensive and remarkably fertile section of country. It is undoubtedly the cheapest line of equal extent ever undertaken in the west, and is probably not exceeded by any in the favorable character of its grades and curves. It forms very nearly a level and straight line. For its whole distance it occupies the table lands, and in no instances descends into valleys depressed much below the general surface of the country. The route is most favorable for a low cost road, and the project merits, though we have spoken in high terms of it, all said in its favor.

The entire length of road will be about 131 miles. The total cost is estimated at $1,640,000, or about $12,520 per mile. These estimates are based upon contracts for construction, entered into with a wealthy and most respectable company of western gentlemen, who are able to bring a large amount of means to the work. The fact, that those best acquainted with the character of the project are willing to invest their means in it, furnishes the right kind of evidence in its favor. Fort Wayne, the western terminus of the road, is the leading town of Northeastern Indiana, as well as one of the most considerable in the State. It is already the centre of a large trade, and is soon to be the junction of important lines of railroad. The most important of these will be the continuation of the Ohio and Indiana line to Chicago, and the great Wabash Valley line. These will cross each other at right angles at this point. The only avenue by which it has heretofore been reached, has been by the Wabash canal, which is closed for at least one third of the year. The contruction of the above lines of road will give entire freedom of movement in all directions, and at all seasons of the year, and will consequently add vastly to the growth and importance of Fort Wayne and the surrounding country.

Of the estimated cost of the road, $830,000 is already secured by stock subscriptions, and the balance is to be provided by the issue of the company's bonds. At the above cost, the net earnings of the road will have to be only $876 net, to pay seven per cent upon the above amount, and only about $450 to pay the accruing interest on the issue of bonds. When we consider that the net earnings of western roads average from $2,000 to $3,000 per mile per annum, and that the earnings of the above road must at least come up to the minimum sum, we cannot doubt that both the stock and bonds in the above road must be sufficiently productive to satisfy the cupidity of the most avaricious.

Western projects are, very properly, engrossing more and more of public attention. People now begin to see that the *stocks* in these roads are the best securities offering. Those who purchased in the outset, with the greatest distrust, and at a low figure, the bonds of the Michigan Southern and Cleveland and Columbus roads, are now eagerly inquiring for their *stocks*, at from 125 to 136. What is true of the above will be true of other western projects. The stocks named sell high, not because they are so much better than similar projects, only because they are better known; and those who make judicious selections of stocks and bonds, in good western projects, at the present low figures, will in a very short time find themselves in the fortunate condition of the *original* and *present* holders of the Cleveland and Columbus, and Michigan, railroads.

Alabama and Tennessee Railroad.

We learn that this road is making most satisfactory progress, and will soon be completed to *Montevallo*, a distance of nearly sixty miles. The receipts of the portion already opened are beyond all anticipation, and give every indication that when the above point is reached, there will be more than sufficient to pay the interest on the entire mortgage debt, upon the whole line of 160 miles. This division traverses a remarkably fertile, productive, and well settled portion of the South, for which the above road furnishes the only suitable outlet.

No new project has come into this market, making a better show of means, than the Alabama and Tennessee road. Though its cost is up to the average of new southern and western roads, it only seeks to borrow at the rate of $5000 per mile for the whole line. The necessary balance is furnished principally by the rich planters upon the route. In no portion of the South is this class more independent and able to carry forward railroad enterprises, than in Alabama, and none is more thoroughly aroused to a conviction of their importance.

The value of the security offered by this company will be readily inferred from the statement that to pay the interest will only require net earnings to the amount of $350 per mile! There cannot be a doubt that they will more than *quintuple* this sum. The division of the road already completed, or rather for which all the materials are provided, will cost more than the whole mortgage debt, and, will alone, should not another mile be constructed, yield a sum more than sufficient to meet the accruing interest. The whole line is, however, under contract, and some portions of the second division are advanced; and the work is being urged forward with increased energy and vigor under the encouragement which the recent very favorable negotiation of the company's bonds gave, of complete and early success.

We see by our southern exchanges, that the people upon the various routes which are proposed as the extension of the above line to the East Tennessee and Georgia railroad, are actively engaged in making surveys, raising the necessary means, and in organizing for active operations. Two or three routes are proposed, and as all traverse very fertile and well settled sections, we think it probable that two of them at least will be built. At any rate there seems to be no doubt that, a road to connect the Alabama and Tennessee road with the Great Central line, running through eastern Tennessee and Western Virginia, will be completed by the time that the former will be opened, so as to form simultaneously teh lower portion of the great line, from which a most lucrative *through* business is anticipated for all the connecting links, and especially the Alabama portion, which forms the southern trunk of the whole.

Indiana Central Railroad.

This road has recently been consolidated with the Dayton and Western, to the mutual advantage, we believe, of both parties. The line of the two companies makes a little over 100 miles, just about the proper length for economical working.

The Dayton and Western road is just completed. The work on the Central is progressing most satisfactorily, and will be completed early next season. Sufficient means are prepared for the construction, and the rails and equipment are already provided, and nothing is wanting but *time* to render this road a fixed fact.

This road from the first has occupied a conspicuous place in popular estimation. The public were familiar with the route of this road, which is identical with the great natinoal road line, long before the railroad was suggested. When this was proposed, it required no effort to convince the public that a proper line for a road had been selected.—The best settled part of Indiana is upon the national road line, from the facilities that this greater work afforded for travel and transportation, over any similar work in the West. To the above causes is to be attributed the high estimation in which the bonds of this company have always been held in this market, and which are now selling at a trifle below par.

The affairs of the company are in good hands, and we have every reason to believe that every precaution will be taken to secure to the stock and bondholders prudent and economical investment of their money.

Long Island.

Railroad from Greenpoint to Flushing.—We understand there is every probability that this project, which is to supply railroad accommodations to an important portion of Long Island, will soon be carried out. It commences at Greenpoint, nearly opposite 15th street in this city, and extends to Flushing, a distance of about seven miles or nine from the lower part of New York. Its estimated cost, including right of way, is only about $220,000, a very small sum when the locality is considered. Flushing is well known to be one of the most beautiful and attractive points in the Island, and there can be no doubt that the proposed road will immediately secure to it a large population from our already overflowing city. Upon the completion of the above road the passage can be made from Flushing to Fulton Ferry in about forty minutes; at the present time it requires from an hour to an hour and a half to make the trip by water, and this route cannot always be relied upon. For six or

eight weeks each year, Flushing bay is closed by ice. The project is not only a very feasible, but promises to be a very profitable one, in addition to proving a great convenience to the people of this city.

Virginia.

Central Railroad.—We learn from Virginia, that the Blue Ridge Tunnel upon the Central road is progressing favorably. The workmen have penetrated the mountain about 1100 feet from the western base, and about 800 feet from the eastern side—making 1900 feet. They are arching at each end with brick and stone. It is the intention of the company, however, not to arch the whole tunnel—only about 520 feet at each end will be arched.

The grading on the road from Waynesboro' to Staunton, 12 miles, is nearly completed—$1,000 worth of work will be sufficient to prepare everything for the laying of the rail. In two months time all can be ready. The cost of these twelve miles, railing and all, is about $20,000 per mile. The progress on the 20 miles under contract west of Staunton, is almost unparalleled in Virginia road making. The grading is already about one-third done, and it is believed that if the stockholders determine to put locomotives upon the road west of the Blue Ridge before the completion of the tunnel, that the steam engine may be heard within fifteen months from this time, at a point 20 miles west of Staunton. The cost of the sections under contract west of Staunton, including, as they do, by far the most costly portions of the road to Covington, will be about $21,000 per mile.

Missouri.

North Missouri Railroad.—A convention of the friends of this projected road is to be held at St. Charles, Missouri, on the 10th November next.—The call for the convention urges prompt action, and states that: "the proposed road will extend from the city of St. Louis to the rich, extensive and populous valley of the Desmoines in Iowa. It will pass through one of the most thickly settled, rich and fertile portions of our State—over a country every way favorable for its construction. And there can be no doubt that the stock will be a profitable investment to men of capital, and it is confidently believed that it will yield a better profit than any other road in the State."

Mississippi Valley Railroad—A meeting was held at St. Louis on the 9th inst., at which Hon. L. M. Kennett, the Mayor of the city presided, and Henry Cobb and A. S. Mitchel acted as secretaries. The preamble and resolutions speak of the large and increasing population west of the Mississippi, and the mineral and agricultural wealth of the States of the valley as requiring new channels to develop the resources of that vast extent of country; and that the best way of doing so is by building a railroad from the Falls of St. Anthony to the Gulf of Mexico.

The people of the States interested in the road are invited to meet at St. Louis in convention on the 15th November next.

Ohio.

Indianapolis and Bellefontaine Railroad.—This work is now finished as far as Winchester, Randolph county, Indiana. 74 miles from Indianapolis and leaving only 9½ miles to lay to Union which will be completed by the last of November next.—The company have recently contracted for ample rolling stock of the first class, with all the modern improvements, to do the anticipated heavy business of the road, when it shall be opened as a link in the through line East, from Indianapolis to Sandusky, Cleveland, Pittsburgh, Wheeling, Columbus, and Cincinnati.

Stock and Money Market.

There is an improved feeling both in the stock and money market over last week. The temporary pressure which we then noted has entirely subsided, and loans both on business paper and on railroad bonds can be effected at as favorable rates as at any previous period during the season. Many of the fancy stocks have advanced materially, and the market is buoyant.

The most important public sale of securities within the week have been $200,000 of New York and New Haven 7 per cent. road bonds, sold by Messrs. Ketchum, Rogers & Bement. The amo't bid was $712,000. The loan was apportioned as follows:

C. H. Marshall	$5,000 *a* 105	
P. Speyer & Co	6,000 *a* 103 5-100	
P. Speyer & Co	7,000 *a* 102 51-100	
P. Speyer & Co	7,000 *a* 102 7-100.	
Winslow, Lanier & Co.	10,000 *a* 102½	
D. S. Kennedy	50,000 *a* 104⅛	Includ'g int.
D. S. Kennedy	50,000 *a* 104⅛	do.
D. S. Kennedy	15,000 *a* 103⅞	do.
D. S. Kennedy	25,000 *a* 103⅛	do.
A. Seton	25,000 *a* 103⅛	

There is an active demand for good railroad securities both in the home and foreign market, and we see no reason to doubt it will remain so for some months to come. The constantly increasing receipts of our roads are daily strengthening the market for this species of property.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 23, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	109
U. S. 6's, 1862	116½
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118½
U. S. 6's, 1868	119½
U. S. 6's, 1868—coupon	119½
Indiana 5's	97½
Indiana 2½	53½
" Canal loan 6's	95½
" Canal preferred 5's	42
Alabama 5's	97
Illinois 6's, 1847	82½
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	107½
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	115
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	123
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110
New York 5's, 1854-'55	107
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	107
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	100½
New York 7's, 1857	110
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	96½
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	104½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Oct. 14.	Oct. 21.
Albany and Schenectady	106	105
Boston and Maine	106½	107
Boston and Lowell	—	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	89	98½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	97½	98
Erie	84½	85½
Fall River	—	—
Fitchburgh	103½	104
Georgia	—	—
Georgia Central	—	—
Harlem	71½	70½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	73½	74
Little Miami	—	—
Long Island	27½	25½
Mad River	—	99
Madison and Indianapolis	107	116½
Michigan Central	110½	111
Michigan Southern	123½	126½
New York and New Haven	113	113
New Jersey	134	128
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	50½	50
Ogdensburgh	26½	25½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	34½	35
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	97½
Rochester and Syracuse	121	121½
Stonington	58	58
South Carolina	—	122½
Syracuse and Utica	130	130
Taunton Branch	115	115
Utica and Schenectady	139	138
Vermont Central	17½	17½
Vermont and Massachusetts	22	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Railroads in Southern Ohio

There appears to be a good degree of probability that two lines of railroad will be constructed, running east to west, through Southern Ohio; each representing corresponding lines in progress west from the cities of Philadelphia and Baltimore. As the two roads will be parallel lines for a considerable distance, and will approach each other at a number of points, we have formerly regretted a difference of opinion between the friends of the two projects, which prevented their union into *one* line. Upon a further consideration, we are convinced that the construction of *two* lines is not only inevitable, but that it is better on the whole, that there should be two, instead of one. There is a strong rivalry between the city of Baltimore and Philadelphia in their efforts to secure the trade of the interior, and there is no reason to believe that they could act harmoniously in the joint management of the same project; nor even that one road would have sufficient capacity to accommodate the business of both trunk lines. The two Ohio lines, therefore, are representatives of entirely distinct interests, as far as their through traffic is concerned. Although parallel lines, they are sufficiently removed from each other, as to leave to each, a large *local* trade, quite sufficient, in our opinion, to afford a reasonable support to both. Such being the fact, we believe it to be much the best course to agree to *differ* in the outset, and to construct two distinct lines, than to be driven to this course, after the feelings of both parties shall have become exasperated from an unsuccessful effort, to unite in one common interest. Both interests, therefore, are pursuing the wisest policy on the whole, and both the Hillsboro' and Chillicothe lines will be built. The Baltimore interests have given the most positive assurances of assistance to the former, and we learn that the Philadelphians have dispatched the Chief Engineer of their great line, for the purpose of making a personal examination into the Chillicothe projects, as a basis of some definite action on their part. To bring this last line to Wheeling, for the purpose of forming a junction with their road, is made the condition of a subscription of $750,000 on their part, to the stock of the former. That Philadelphia will extend this aid, we have no doubt. She will be forced into this step, whether willingly or not, by the rival works which New York is constructing on the one hand, and Baltimore on the other. But instead of holding back, the required aid will be *proffered* and not grudgingly yielded. A city of the magnitude of Philadelphia, cannot expect to maintain her position, without adopting, in self defence, the same course that her rivals are pursuing to wrest her trade from her. So potent are the influences that modern science has brought to bear in changing the routes of our established commerce and in developing new, that the city which neglects to avail herself of them, must retrograde, instead of advancing. The sacrifices that every community is compelled to make, to sustain its position is one of the penalties for living in this age of improvement. Our friends in the Chillicothe projects need be under no apprehension of any refusal to assist them on the part of Philadelphia.

The portion of this last named road for which aid is sought in Philadelphia, is that from Marietta to Wheeling, a distance of about 75 miles.—This is an important line of road, in connecting as it will, the road of the two extreme portions of the State. The money expended upon this cannot fail to yield a good return, as a matter of investment, and Philadelphia capital cannot be better employed for its owners even, than in its construction. In every point of view the inducement that the Philadelphians have to construct this link does not bear a doubt as to the result.

Again, it is necessary that Philadelphia should begin to manifest some interest in Western improvements, if for nothing more than to retain the good will, and consequently the trade, of her old patrons and customers. The great want in the West is felt to be railroads. They are what the whole western population are struggling for. New York is as yet the only city that has fully responded to the great want. She has become the patron of the railroad interest throughout the country, is furnishing, with a most liberal hand, the means for their construction. The result is that she is introducing herself to the trade, and securing the good of our people in whatever part of the United States. She has become the centre of negotiation for all the railroads in progress in the country. As our railroad stocks and bonds are now becoming favorite securities with European capitalists, vast sums are being weekly, and almost daily received from across the water, for investment in our railroads. All this money comes to New York, and all the negotiations are carried on through New York houses. All dividends, and the interest on the securities, are paid *here*. The result is that these numerous transactions, collect, and keep in deposit, in our banks, vast sums of money, which to a certain extent, become the basis of Bank accommodations; and hence the uniform abundance of money in this city, while it is scarce in all others. All these advantages, and the rapid progress that the trade of New York is making in every part of the country, is directly attributable to the superior enterprize of our people in the West, identifying themselves with the progress of our railroad enterprizes. The railroad capital of the United States which now represents a sum of over $400,000,000, is fast centering in New York, and unless the city of Philadelphia checks this tendency to centralization, by pursuing a similar policy, she will be completely overshadowed by the vast wealth of the former. Let her think of these things before it shall be too late to avert the threatened dangers.

Ohio Central Railroad.

This road is now nearly completed from Columbus to Zanesville, a distance of about sixty miles. That portion from Zanesville to Newark has been in operation some time past and has been doing a very profitable business. At Newark it forms a junction with the Newark and Sandusky, and thro' this with the Cleveland and Columbus lines. The road, from Columbus to Zanesville, traverses one of the best portions of Ohio, and which will afford a very large amount of freight and travel.

The eastern division of the above road is also under contract to the Ohio river, a distance of about 80 miles. At Wheeling it will form a junction with the Baltimore and Ohio, and the Hempfield extension of the Pennsylvania line of road. For these the above will form their appropriate extension to Central Ohio. The Central company have already provided sufficient means to make the completion of this division secure. The work is to be pushed with the energy and vigor that the nature of the case requires. As soon as the Baltimore and Philadelphia lines are completed to Wheeling, they will accumulate a mass of business at that point, that must supply a most lucrative traffic to any road that is to be the avenue of this trade east and west.

Railway Bridge over the River Wye.

The crossing of large rivers or arms of the sea by bridges of great span, and able to sustain the weight and jar of a heavy train passing at a considerable velocity, is a problem of the utmost importance. The different solutions by men of the highest engineering talent in England and this country, are worthy an attentive study and comparison. We are already familiar with the Britannia tubular bridge over the Menai, and the description of the railroad bridge across the Niagara, proposed by Mr. Roebling, has been published in full from the report of the Engineer himself.

Another work of this character is the railway bridge over the river Wye, on the line of the South Wales railway, the construction of which is due to the inventive genius of Mr. Brunel. The Wye is a rapid and navigable stream, and to prevent obstructions to its navigation the Admiralty required that the structure over the mid channel should be not less than 300 feet in span, and with a clear headway of 50 feet over the highest known tides.—The plan of Mr. Brunel shows his peculiarly original and bold conception, accompanied by extraordinary economy, by arranging his materials in the form of a large suspended truss, and attaching the roadway to suspension chains kept in a state of rigidity by vertical trusses or struts inserted between the chains and a circular wrought iron tube spaning the river.

The bridge is 600 feet long: there are three spans over the land of 100 feet each, which are supported upon cast iron cylinders, 6 feet in diameter and 1¼ inch thick. These cylinders were sunk to an average depth of 48 feet, through numerous beds of clay, quicksand, marl, etc., to the solid limestone rock, which was found to dip at an angle of 45 degrees; it had, therefore, to be carefully levelled horizontally, and the cylinders bedded level. These cylinders were sunk by excavating within them, and pressing them down by heavy weights; in doing which very great difficulties were overcome—immense volumes of fresh water were tapped, requiring a 30 horse engine to pump them out. The quantity very much increased during high water, which rises 44 feet, and in many of the cylinders work had to be suspended until the tide receded.—Although the Wye is a tidal river, and therefore salt, no salt water was found in these sinkings.—Again, dangers arose from sudden and extensive irruptions of soft river silt, often bursting in with such rapidity that the men had hardly time to escape. Some of the strata were found covered with immense conglomerate boulders, indicating a former river bed. These having been overcome, the cylinders were filled with concrete, composed of Portland cement, sand and gravel, which set in a few days as hard as rock. The concrete is filled up to the level of the roadway, so that, should a cylinder decay, it might be taken out and replaced in sections in safety.

There are six cylinders at the west end of the main span; upon those, a standard or tower of cast iron plates, fifty feet high, is erected. A similar tower of masonry is built at the east end, upon the edge of the rocky precipice of the Wye.

Openings are left in the standard through which the trains pass. On the west standard is a cross girder of wrought iron above the roadways, on which the wrought iron tubes rest. These tubes serve to keep apart and steady the towers, and to their ends are attached the suspending chains.

Now, in an ordinary suspension bridge, the chains hang in a festoon, and are free to move, according

to the limited weights passing under them; but this flexibility would be inadmissible in a railway bridge, and the continuity of the rail would be destroyed if a very small deflexion took place when passed over by a heavy locomotive. With a view to give this necessary rigidity, Mr. Brunel has introduced at every third part of the tube a stiff wrought iron girder, connecting firmly the tube to the roadway girders; and, with the aid of adjusting screws, the suspension chains are pulled or stretched as nearly straight as desirable. Other diagonal chains connect these points, so that at whatever part of the bridge an engine may be passing its weight is distributed all over the tube and chains by these arrangements.

The tube is laid upon the iron standards, but is free to move upon rollers at the top of the masonry standard. The expansion on the hottest day yet experienced has not exceeded one inch.

The tube is strengthened within by the introduction of diaphragms or discs at every 30 feet, which renders it both light and stiff.

The roadway girders are formed of a deep thin plate of iron stiffened at intervals at the top, it has a strong triangular cell to resist compression, and at the bottom a double plate of rivetted iron to resist extension. Small cross girders are rivetted to these side girders diagonally. On these 4 inch creosoted planks are fastened crossing them in the opposite diagonal direction. Eighteen inches of gravel are laid over this floor, and on this bed the ordinary permanent way on longitudinal sleepers. One roadway was opened for travel on the 19th of July last, the tube and other portions of the second part are ready to be put up.

Annexed is a summary of the cast and wrought iron used in the bridge:—

	Tons.	cwts.	qrs.
Wrought iron, in three spans of 100 feet each, double line	277	0	0
Wrought iron in the girders, floor-bearers, and other work of the main span of 300 feet, double line	278	6	1
Two wrought iron tubes, each 312 feet long	302	11	0
Wrought iron beam on the standard to support the tubes	20	5	0
Vertical trusses	37	0	1
Tie girders to connect the caps of columns	1	10	0
Suspending links in main chains and diagonals	256	5	2
Saddles at points of suspension rollers	41	10	1
Adjusting screws	2	10	0
Rollers of main tube	7	17	3
Rollers of girders	2	11	3
Bolts	3	15	0
Total wrought iron	1231	2	2
	Tons.	cwts.	qrs.
Cast-iron bed plates for trusses	24	6	1
" standard	128	6	0
" caps for columns and parapets	21	0	0
" cylinders in the supporting piers	830	0	0
Total cast iron	1003	12	1
Wrought iron....1231 2 3	2234	14	4
Cast iron.....1003 12 1			

Masonry in abutment and pier, 3240 cubic yards.

Total estimated cost of the bridge when entirely completed, £65,420.

A number of ingenious arrangements are connected with the bridge to ensure elements of strength and rigidity in the structure. Among these may be mentioned the cast iron ring or circle attached to the ends of the tube to prevent collapse; to the wedges introduced under the vertical trusses to adjust the exact tension upon the chains; to the curve given to the tubes themselves, increasing their strength; and to the roller-boxes under the vertical trusses, by which means the road girders are maintained in a position to expand or contract independently of the movements of the main tube.

The Mountain Lake Water Company of San Francisco.

New York and Boston boast the engineering skill and costly works that have supplied them with that most important acquisition for city salubrity, pure water; and San Francisco will, we hope, soon be able to point to the abundant streams derived from her mountain springs and lakes. Indeed we may entertain the hope that this will be a precursor to other works of internal improvement in our El Dorado State, and that the valley of the Sacramento and San Joaquin may be traversed by railroads even before California is connected with the two iron arms that now are reaching forth to bind her, on the one hand with the Gulf of Mexico, and on the other hand with the Great Lakes and the St. Lawrence.

The Mountain Lake company was organized on the 14th August, 1851, under the general corporation act of California, and a grant of the city of San Francisco to lay down pipes in the streets of that city for 20 years, and an exclusive privilege for the term of 5 years from the 1st January, 1853, on condition that the corporate authorities of San Francisco shall use the water for extinguishing fires and also that after the completion of the works, the supply shall not fall below one million of gallons daily.

We learn from the report of the Engineer, Henry S. Dexter, Esq., that the Lake is on the line of Pacific St. San Francisco, produced, and 3 miles and 225 rods distant from the corner of that street and Kearney street. On the 1st of December, after two dry seasons, the surface of the lake was 123 76-100 feet above Pacific wharf, and its area 7½ acres.—The average depth was 16. When full, the Lake has an available depth of 24 feet, and an area of 10¼ acres. It is situated in a basin surrounded by hills, some rising 300 feet above it, and receives the drainage of a considerable extent of country.—There is no visible outlet, there being about 300 yards from the head of the ravine through which the brook flows, which discharges the percollating waters of the lake. This ravine is ¼ of a mile long, and has an average width of 100 yards. The hills skirting it are higher than the Lake, and the ridge separating the lake from the ravine is 18 feet above the surface of the lake. Of course to render the water available for the supply of the city, it is necessary to intercept the flow of the water through the ravine, it is proposed to effect this by running a puddle wall and ditch across the ravine, and carry it as high as the surface of the water. The wall is to be carried down to the hard pan or other strata impervious to water, and in its centre a row of sheet piling composed of 3 inch red wood planks sawed for the purpose and battened with inch red wood boards is to be inserted. At the lake two powerful steam engines are to be erected, forcing the water from the lake to a distributing reservoir on Cannon Hill, in the neighborhood of the city. The pipe connecting this reservoir and the pumps is to be 16 inch bore. 1¼ inches thick for the first 2,100 feet, and decreasing in thickness towards the summit.—The bottom of the reservoir on Cannon Hill will be 360 feet above Pacific wharf, and 236 above the lake surface, the distance of Cannon Hill from the lake is about 1¼ miles, and 2½ miles from the corner of Pacific and Kearney streets. The cost of pipes, engines, reservoirs, etc., by this plan, is estimated at $459,453. Another plan dispenses with pumps, and conducts the water from the lake to a distributing reservoir, at a level of 107 feet above Pacific wharf, on the slope of a hill at the North Beach. The estimated cost of this line is $392,971.

The estimated gross income for the year 1852, is set down at $10 a month, for 3,000 houses $360,000, and for 1853, for 5,000 houses $600,000.

The lake forms a species of natural reservoir, and is fed by springs—the main body of its waters are supplied by the lower strata passing through the adjoining hills, and extending to the high range on the opposite side of the entrance to the harbor.—The present outlet forms a rapid brook, the discharge of which is estimated at from 8 to 10 million gallons daily. A similar lake in the vicinity called the *Laguna Honda* and 200 feet above the Mountain lake, can be added to it in case the supply is not sufficient. This, it is estimated, will furnish 4 to 5 million of gallons daily.

Thus at an expenditure of less than $500,000 the city of San Francisco will be supplied with pure and wholesome water. An almost equally important consideration is the protection of the city, and the merchandize of which it is the depot from destruction by fire. The numerous destructive conflagrations that have swept over that city destroying millions of property, show the necessity of an abundant supply of water. Its exposure to strong winds springing up daily, has hitherto rendered the most solidly constructed stores and warehouses insecure, and it is only by the introduction of unfailing and copious streams of water that exemption can be hoped for. The works which are destined to secure this end must prove as profitable as they are indispensable to that capital of the gold region, and probable centre of the future mighty commerce of the Pacific basin.

Mississippi and Chicago Railroad.

We learn, says the Chicago Tribune, that the party of Engineers, appointed to survey a line for the Mississippi and Chicago railroad, have reached the Summit, about twelve miles from the city, on their way to this point. We are informed that the surveys show a much more favorable grade than was expected. The survey is through Lockport, to touch which requires scarcely any divergence from a direct line.

It is rumored that the parties interested are trying to make arrangements for the sale of that portion of the Rock Island and Chicago road, lying between this city and Joliet, to the Mississippi and Chicago company, and that the latter will, next year, construct a *cut off* track from Joliet to La Porte.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.
Portland, Sept. 21, 1852. tf

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.
September 9, 1852. 2m

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

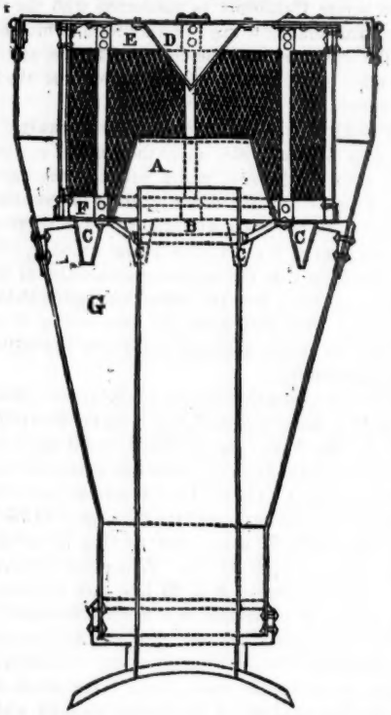
Also—

MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.
Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co. Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,

Importer of Stationary 191 Pearl st., N. Y

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.

Oct. 2, 1852. 1y*

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments; also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent.*
SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO, of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

$250.000
San Francisco Water Loan.

Ten per cent. Bonds of $1,000 *each, with Coupons, payable semi-annually, in the City of New York, redeemable on 1st November,* 1862.

THE UNDERSIGNED, PRESIDENT OF the Mountain Lake Water Company, of the City of San Francisco, in the State of California, will receive sealed proposals at the office of Messrs. Dias & Thomas, No. 52 Wall street, in the city of New York, until Thursday, the 4th day of November, 1852, at 2 o'clock P. M., for the whole, or any part of the above mentioned Loan, which will bear an interest at the rate of ten per cent. per annum, payable semi-annually in the City of New York, and be redeemable on the 1st day of November, 1862, in the city of New York.

The undersigned will avail himself of the usual privilege of rejecting conditional bids, and of declining such as he may deem not advantageous.

Bids should be directed "Proposals for San Francisco Water Bonds," and sent to the subscriber.

Twenty per cent. and the premium will be payable on the day after opening the bids, and the balance with accrued interest may be paid at the option of the bidder any time before the first day of February next, thus giving Capitalists an opportunity to secure a most reliable and permanent investment, without precipitately disturbing their financial arrangements.

The debt created by the issue of these Bonds, is for the purpose of paying for the necessary pipes, and fixtures, more than sufficient means being already provided for the purpose of building the dams; reservoirs, laying the pipes, and completing the works; the entire capital of the Company ($500,000,) having been subscribed by the citizens of San Francisco; the subscribers embracing many of its most wealthy and respectable Merchants and Bankers. This is the first and only debt of the Company, and the repayment of the same is secured, by the Transfer in Trust, to James B. Bond and William M. Burgoyne, of all the property and franchises of the Company, valued at upwards of One Million of Dollars.

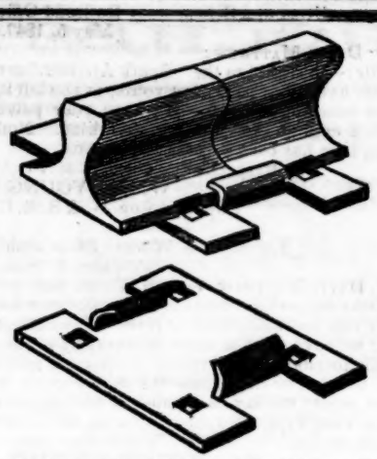
The Company have by law the exclusive right of laying pipes within the city limits, and own by purchase the only source from which water can be introduced into the city.

The Stock of this Company will probably be the best paying stock in the Union.

Copies of the Laws, Reports of Engineer, etc., can be had by calling at the office of Messrs. Dias & Thomas, No. 52 Wall street, second story.

SAMUEL PURDY, President.

New York, October 2, 1852.



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired. Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:

John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D., X. & B. Railroad, Xenia.
A. Degraffe, Railroad Contractor,
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank.

October 8, 1852.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 38

PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,

ALSO,

Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

I on Tubes for Artesian Wells, screwed together flush on either side.

HOMAS PROSSER & SON, Patentees,
28 Platt street, New York.

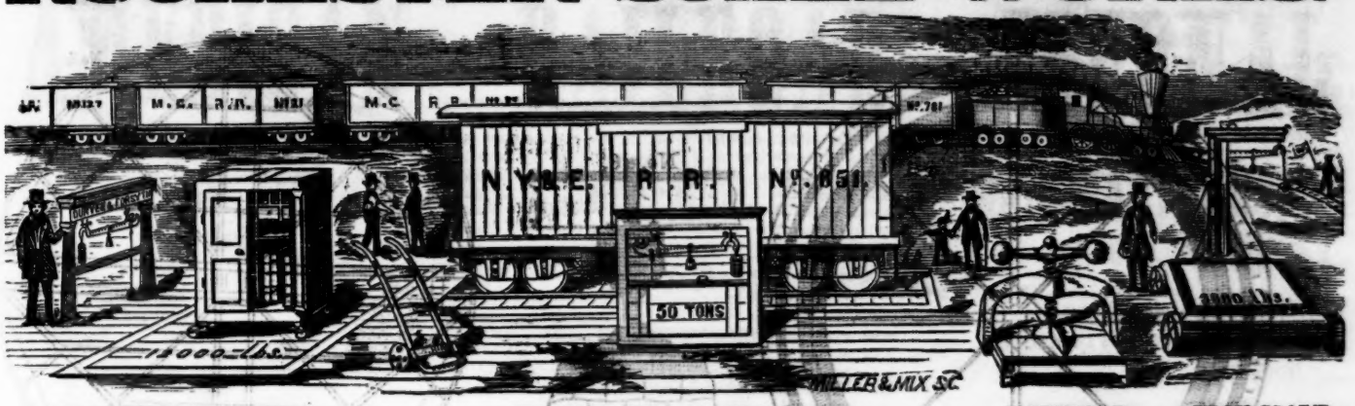
Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1849, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

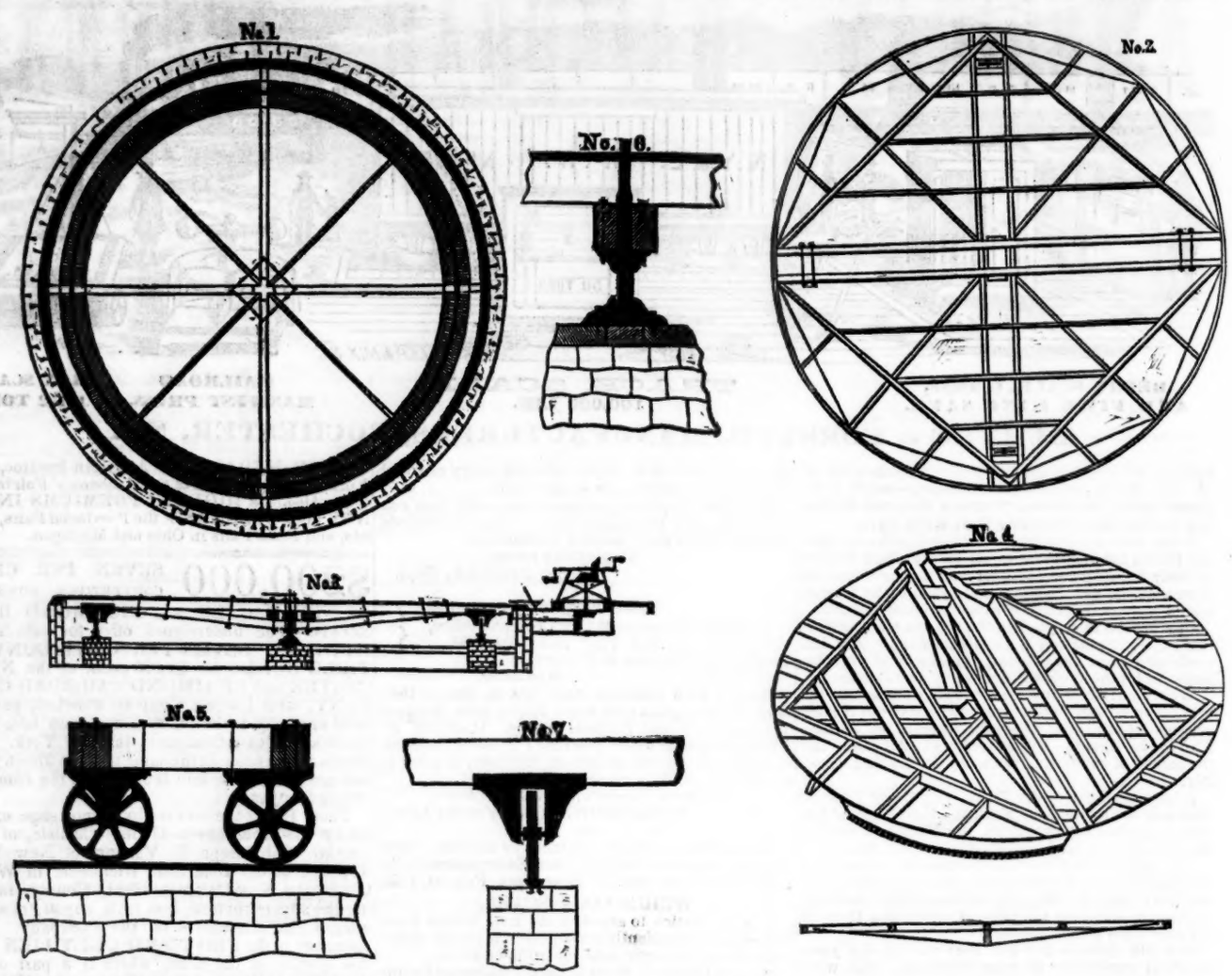
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st,

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.